STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT (Farhad Ghodrati, Rebecca Tuden) MEETING DATE: April 20, 2005

ITEM: 7

SUBJECT: Proposed Amendment to the Water Quality Control Plan (Basin Plan) for San

Francisco Bay Region to Establish a Tomales Bay Watershed Pathogens Total Maximum Daily Load (TMDL) and Implementation Plan—Hearing To Receive

Testimony on Proposed Amendment

CHRONOLOGY: November 2002 — Preliminary Tomales Bay Watershed pathogens TMDL report

March 2004 — Final Tomales Bay Watershed pathogens TMDL report

DISCUSSION:

This is the first of a two-step hearing process to establish a TMDL and an implementation plan to control pathogen discharges in the Tomales Bay watershed and protect the public from exposure to waterborne diseases. This first hearing is an opportunity for stakeholders to communicate directly to the Board and for the Board to ask questions of stakeholders and staff on the proposed Basin Plan amendment, supporting staff report, and required CEQA analyses (Appendix A). The public comment period is scheduled to close at the conclusion of this hearing, after which staff will compile and prepare responses to all written and oral comments received, and revise the proposed Basin Plan amendment, TMDL, and supporting report, as appropriate. At a second hearing, currently scheduled for the June 15, 2005, Board meeting, stakeholders will be invited to comment on any new revisions to the proposed regulatory action, and the Board will be asked to consider comments and staff responses and establish the TMDL by adopting the proposed Basin Plan amendment.

Monitoring results for Tomales Bay and its main tributaries (Lagunitas, Walker, and Olema creeks) indicate that these waters exceed bacteria water quality objectives for shellfish harvesting and recreational waters and are therefore impaired by pathogens. Pathogens are water-transmissible parasitic organisms capable of causing disease in their hosts. The presence of pathogens is inferred from high fecal coliform bacteria (a commonly used indicator of human pathogenic organisms) concentrations. Pathogen pollution is adversely affecting existing beneficial uses, which include shellfish harvesting (i.e., sport and commercial oyster, clam, and mussel harvesting), water contact recreation (i.e., swimming and fishing) and non-contact water recreation (i.e., boating). Controllable pathogen sources in this watershed are faulty septic tanks, sewage treatment plants, boat discharges, municipal runoff, and horse, dairy, and cattle ranches.

The proposed Basin Plan amendment will establish the following:

- Numeric water quality targets for pathogens in shellfish growing and recreational use waters:
- A density-based total maximum daily load of 14 fecal coliform/100 mL for Tomales Bay and 43 fecal coliform/100 mL for Tomales Bay tributaries;
- TMDL allocations for the various categories of pathogen sources;
- A plan to implement the TMDL; and
- A plan and schedule for monitoring water quality, reviewing progress toward meeting targets, implementing source control actions, and evaluating the appropriateness and effectiveness of control actions.

The last two bullets reflect an adaptive approach to implementing the TMDL and attaining pathogen (fecal coliform) water quality standards. Adaptive implementation involves taking actions commensurate with available data and information while continuing to improve our understanding of the problem and its solutions. Inherent to this approach is a commitment to review and revise the TMDL and implementation plan as we gain knowledge, particularly if we discover unanticipated consequences. Tomales Bay and its tributaries are also impaired by nutrients and sediment. Actions capable of reducing pathogens, nutrients, and sediment discharges at the same time are strongly encouraged. The forthcoming sediment and nutrients TMDLs will build upon the pathogen TMDL implementation plan and recognize early implementation actions undertaken.

We have been actively participating in Tomales Bay Watershed stakeholder forums for many years, and during the development of this proposed TMDL we offered many opportunities for stakeholder input. Upon completion of the preliminary and final staff reports, we solicited stakeholder input and revised subsequent reports as appropriate. In addition, the scientific basis of the proposed Basin Plan amendment was peer reviewed and revised accordingly.

Tomales Bay supports one of the few remaining commercial shellfish growing areas on the west coast, and the TMDL focuses on protecting shellfish consumers and recreational water users while balancing the desire to sustain agriculture in the watershed. A few stakeholders have expressed concern regarding implementation consequences and the feasibility of attaining targets. The proposed TMDL is both equitable and flexible. The implementation plan requires all sources to undertake reasonable and feasible measures to reduce their loading and encourages dischargers to create their own solution to the problem.

RECOMMEN-DATION: No action is necessary at this time.

APPENDIX:

A – Proposed Basin Plan Amendment and Supporting Staff Report, *Pathogens in Tomales Bay Watershed, Total Maximum Daily Load.*